

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method to detect *vanA* in a sample, comprising:
 - a) contacting a sample suspected of comprising amplified *vanA* nucleic acid with at least one *vanA*-specific oligonucleotide probe under conditions effective to form a double stranded hybrid between the *vanA*-specific oligonucleotide probe and *vanA* nucleic acid in the sample, wherein the *vanA*-specific oligonucleotide probe consists of no more than [[15 to]] 40 nucleotides and has a sequence with at least 80% contiguous nucleic acid sequence identity to SEQ ID NO:3 or the complement of SEQ ID NO:3, wherein the amplified *vanA* nucleic acid is obtained with a first and a second oligonucleotide primer each consisting of 15 to 40 nucleotides, wherein the first oligonucleotide primer has a sequence with at least 80% contiguous nucleic acid sequence identity to SEQ ID NO:2, and the second oligonucleotide primer has a sequence with at least 80% contiguous nucleic acid sequence identity to SEQ ID NO:4, wherein the sequence of the probe with at least 80% contiguous nucleic acid sequence identity to the complement of SEQ ID NO:3 or SEQ ID NO:3 is one which is effective to form a double stranded hybrid with SEQ ID NO:3 or its complement, respectively, wherein the sequence of the first primer with at least 80% contiguous nucleic acid sequence identity to SEQ ID NO:2 is one which is effective to form a double stranded hybrid with the complement of SEQ ID NO:2, and wherein the sequence of the second primer with at least 80% contiguous nucleic acid sequence identity to SEQ ID NO:4 is one which is effective to form a double stranded hybrid with the complement of SEQ ID NO:4; and
 - b) detecting or determining the presence or amount of hybrid formation between the probe and nucleic acid in the sample, wherein hybrid formation is indicative of *vanA* nucleic acid in the sample.
2. (Withdrawn) A method to detect *vanB* in a sample, comprising:
 - a) contacting a sample suspected of comprising amplified *vanB* nucleic acid with at least one *vanB*-specific oligonucleotide probe under high stringency hybridization conditions effective

to form a hybrid between the *vanB*-specific oligonucleotide probe and *vanB* nucleic acid in the sample, wherein the *vanB*-specific oligonucleotide probe comprises sequences which include sequences substantially corresponding to nucleotides 387 to 404 of the *vanB* gene, the complement thereof, or a portion thereof, sequences substantially corresponding to nucleotides 406 to 423 of the *vanB* gene, the complement thereof, or a portion thereof, or sequences substantially corresponding to nucleotides 426 to 446 of the *vanB* gene, the complement thereof, or a portion thereof; and

- b) detecting or determining the presence or amount of hybrid formation.

3. (Withdrawn) A method to detect *vanA* in a sample, comprising:

- a) contacting a biological sample suspected of comprising nucleic acid with at least one *vanA*-specific oligonucleotide primer under conditions effective to amplify *vanA* nucleic acid, wherein the *vanA*-specific oligonucleotide primer comprises sequences which include sequences substantially corresponding to nucleotides 870 to 896 of the *vanA* gene, the complement thereof, or a portion thereof, sequences substantially corresponding to nucleotides 851 to 868 of the *vanA* gene, the complement thereof, or a portion thereof, or sequences substantially corresponding to nucleotides 898 to 917 of the *vanA* gene, the complement thereof, or a portion thereof; and

- b) detecting or determining the presence or amount of amplified nucleic acid.

4. (Canceled).

5. (Withdrawn) The method of claim 3 wherein one *vanA*-specific oligonucleotide primer comprises sequences corresponding to nucleotides 851 to 868 of the *vanA* gene or a portion thereof.

6. (Withdrawn) The method of claim 3 wherein one *vanA*-specific oligonucleotide primer comprises sequences corresponding to the complement of nucleotides 898 to 919 of the *vanA* gene or a portion thereof.

7. (Withdrawn) The method of claim 3 wherein the presence or amount of amplified nucleic acid is detected or determined with an oligonucleotide probe comprising sequences corresponding to nucleotides 870 to 896 of the *vanA* gene, the complement thereof or a portion thereof.
8. (Previously Presented) The method of claim 1 wherein the *vanA*-specific oligonucleotide probe consists of SEQ ID NO:3 or a sequence with 90% nucleic acid sequence identity thereto, or the complement thereof.
9. (Previously Presented) The method of claim 8 wherein the amplified nucleic acid is obtained by amplifying a biological sample comprising nucleic acid with at least one *vanA*-specific oligonucleotide primer which consists of SEQ ID NO:2 or a sequence with 90% nucleic acid sequence identity thereto, or to SEQ ID NO:4 or a sequence with 90% nucleic acid sequence identity thereto.
- 10-12. (Canceled)
13. (Withdrawn) The method of claim 2 wherein one *vanB*-specific oligonucleotide probe comprises sequences corresponding to nucleotides 406 to 423 of the *vanB* gene, the complement thereof or a portion thereof.
14. (Withdrawn) The method of claim 13 wherein the amplified *vanB* nucleic acid is obtained by amplifying a biological sample comprising nucleic acid with at least one *vanB*-specific oligonucleotide primer comprising sequences corresponding to nucleotides 387 to 404 of the *vanB* gene or a portion thereof, or sequences corresponding to the complement of nucleotides 426 to 446 of the *vanB* gene or a portion thereof.
15. (Previously Presented) The method of claim 1 wherein the sample is a physiological sample.

16. (Original) The method of claim 15 wherein the sample is a peri-rectal sample.
17. (Previously Presented) The method of claim 1 or 8 further comprising contacting a corresponding sample with a probe which is not a *vanA*-specific probe.
18. (Previously Presented) The method of claim 1 or 8 further comprising contacting the sample with a probe which is not a *vanA*-specific probe.
19. (Previously Presented) The method of claim 17 further comprising comparing the presence or amount of hybrid formation with the *vanA*-specific oligonucleotide probe to the presence or amount of hybrid formation between the sample contacted with the non-*vanA* probe.
20. (Withdrawn) The method of claim 2, 12, or 13 further comprising contacting a corresponding sample with a probe which is not a *vanB*-specific probe.
21. (Withdrawn) The method of claim 2, 12, or 13 further comprising contacting the sample with a probe which is not a *vanB*-specific probe.
22. (Withdrawn) The method of claim 20 or 21 further comprising comparing the presence or amount of hybrid formation with the *vanB* probe to the presence or amount of hybrid formation between the sample contacted with the non-*vanB* probe.
23. (Previously Presented) The method of claim 17 wherein the non-*vanA* probe is a *vanB*-specific probe.
24. (Withdrawn) The method of claim 20 or 21 wherein the non-*vanB* probe is a *vanA*-specific probe.
25. (Previously Presented) The method of claim 8, wherein the probe is labeled.

26. (Withdrawn) The method of claim 23 wherein the *vanA*-specific probe is labeled with a different label than the *vanB*-specific probe.

27. (Withdrawn) The method of claim 24 wherein the *vanB*-specific probe is labeled with a different label than the *vanA*-specific probe.

28. (Withdrawn) A method to detect *vanA* nucleic acid and *vanB* nucleic acid in a sample, comprising:

a) contacting a sample suspected of comprising amplified *vanA* nucleic acid or amplified *vanB* nucleic acid with at least one *vanA*-specific oligonucleotide probe and with at least one *vanB*-specific oligonucleotide probe under high stringency hybridization conditions effective to form a hybrid between the *vanA*-specific oligonucleotide probe and amplified *vanA* nucleic acid and between the *vanB*-specific oligonucleotide probe and amplified *vanB* nucleic acid, wherein the *vanA*-specific oligonucleotide probe comprises sequences which include sequences substantially corresponding to nucleotides 870 to 896 of the *vanA* gene, the complement thereof, or a portion thereof, sequences substantially corresponding to nucleotides 851 to 868 of the *vanA* gene, the complement thereof, or a portion thereof, or sequences substantially corresponding to nucleotides 898 to 917 of the *vanA* gene, the complement thereof, or a portion thereof, and wherein the *vanB*-specific oligonucleotide probe comprises sequences which include sequences substantially corresponding to nucleotides 387 to 404 of the *vanB* gene, the complement thereof, or a portion thereof, sequences substantially corresponding to nucleotides 406 to 423 of the *vanB* gene, the complement thereof, or a portion thereof, or sequences substantially corresponding to nucleotides 426 to 446 of the *vanB* gene, the complement thereof, or a portion thereof; and

b) detecting or determining the presence or amount of hybrid formation.

29. (Withdrawn) A method to detect *vanA* nucleic acid and *vanB* nucleic acid in a sample, comprising:

a) contacting a biological sample suspected of comprising *vanA* or *vanB* nucleic acid with at least one *vanA*-specific oligonucleotide primer under conditions effective to amplify *vanA* nucleic acid and with at least one *vanB*-specific oligonucleotide primer under conditions

effective to amplify *vanB* nucleic acid, wherein the *vanA*-specific oligonucleotide primer comprises sequences which include sequences substantially corresponding to nucleotides 870 to 896 of the *vanA* gene, the complement thereof, or a portion thereof, sequences substantially corresponding to nucleotides 851 to 868 of the *vanA* gene, the complement thereof, or a portion thereof, or sequences substantially corresponding to nucleotides 898 to 917 of the *vanA* gene, the complement thereof, or a portion thereof, and wherein the *vanB*-specific oligonucleotides primer comprises sequences which include sequences substantially corresponding to nucleotides 387 to 404 of the *vanB* gene, the complement thereof, or a portion thereof, sequences substantially corresponding to nucleotides 406 to 423 of the *vanB* gene, the complement thereof, or a portion thereof, or sequences substantially corresponding to nucleotides 426 to 446 of the *vanB* gene, the complement thereof, or a portion thereof; and

b) detecting or determining the presence or amount of amplified nucleic acid.

30. (Withdrawn) The method of claim 29 wherein the presence or amount of amplified nucleic acid is detected with at least one *vanA*-specific oligonucleotide probe and at least one *vanB*-specific oligonucleotide probe.

31. (Withdrawn) The method of claim 28 or 30 wherein the at least one *vanA*-specific oligonucleotide probe and the at least one *vanB*-specific oligonucleotide probe have different labels.

32-43. (Cancelled)

44. (Previously Presented) The method of claim 18 further comprising comparing the presence or amount of hybrid formation with the *vanA*-specific oligonucleotide probe to the presence or amount of hybrid formation between the sample contacted with the non-*vanA* probe.

45. (Previously Presented) The method of claim 18 wherein the non-*vanA* probe is a *vanB*-specific probe.

46. (Previously Presented) The method of claim 1 wherein the *vanA*-specific oligonucleotide probe consists of SEQ ID NO:3 or a sequence with 85% nucleic acid sequence identity thereto, or the complement thereof.
47. (Previously Presented) The method of claim 8 wherein the amplified nucleic acid is obtained by amplifying a biological sample comprising nucleic acid with at least one *vanA*-specific oligonucleotide primer which consists of SEQ ID NO:2 or a sequence with 85% nucleic acid sequence identity thereto, or to SEQ ID NO:4 or a sequence with 85% nucleic acid sequence identity thereto.
48. (Previously Presented) The method of claim 1 wherein the *vanA*-specific oligonucleotide probe consists of SEQ ID NO:3 or a sequence with 95% nucleic acid sequence identity thereto, or the complement thereof.
49. (Previously Presented) The method of claim 8 wherein the amplified nucleic acid is obtained by amplifying a biological sample comprising nucleic acid with at least one *vanA*-specific oligonucleotide primer which consists of SEQ ID NO:2 or a sequence with 95% nucleic acid sequence identity thereto, or to SEQ ID NO:4 or a sequence with 95% nucleic acid sequence identity thereto.
50. (Previously Presented) The method of claim 1 wherein the first primer has at least 17 contiguous nucleotides of SEQ ID NO:2.
51. (Previously Presented) The method of claim 1 wherein the second primer has at least 17 contiguous nucleotides of SEQ ID NO:4.
52. (Previously Presented) The method of claim 1 wherein the probe has at least 17 contiguous nucleotides of SEQ ID NO:3 or its complement.

53. (Previously Presented) The method of claim 1 wherein the first primer has at least 17 contiguous nucleotides of SEQ ID NO:2 and the second primer has at least 17 contiguous nucleotides of SEQ ID NO:4.

54. (Currently Amended) The method of claim 1 wherein the first primer consists of SEQ ID NO:2 and the second primer consists of SEQ ID NO:4.

55. (Previously Presented) The method of claim 53 or 54 wherein the probe consists of SEQ ID NO:3 or its complement.

56. (Previously Presented) The method of claim 1 wherein the sequence of the probe and primers has no repeats, no GC rich 3' end, and has a T_m of about 59°C.

57. (Previously Presented) The method of claim 1 wherein the primers and probe have 15 to 20 contiguous nucleotides of *vanA*-specific sequence.

58. (New) The method of claim 1 wherein the *vanA*-specific oligonucleotide probe consists of a sequence that is at least 80% identical to SEQ ID NO:3 or the complement of SEQ ID NO:3, wherein the first oligonucleotide primer consists of a sequence that is at least 80% identical to SEQ ID NO:2, and wherein the second oligonucleotide primer consists of a sequence that is at least 80% identical to SEQ ID NO:4.

59. (New) The method of claim 1 wherein the first primer includes SEQ ID NO:2 and optionally sequences unrelated to *vanA* sequences at the 5' end and wherein the second primer includes SEQ ID NO:4 and optionally sequences unrelated to *vanA* sequences at the 5' end.

60. (New) The method of claim 59 wherein the probe includes SEQ ID NO:3 or its complement and optionally sequences unrelated to *vanA* sequences at the 5' end, the 3' end, or both the 5' and 3' ends.